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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,096	07/19/2001	Roberto Ponticelli	38146	7387
29569	7590	12/04/2003	EXAMINER	
JEFFREY FURR 253 N. MAIN STREET JOHNSTOWN, OH 43031			GOLD, AVI M	
			ART UNIT	PAPER NUMBER
			2157	

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/682,096

Applicant(s)

PONTICELLI, ROBERTO

Examiner

Avi Gold

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_.

### **DETAILED ACTION**

This action is responsive to the application filed July 19, 2001. Claims 1-18 are pending. Claims 1-18 represent method for generating commands for network controller modules of peripheral devices.

### ***Claim Objections***

1. Claims 3, 4, 12, and 13 are objected to because of the following informalities: On the third line the word plurality is incorrectly spelled. Appropriate correction is required.
2. Claim 18 is objected to because of the following informalities: On the second to last line "a period" is used twice in a row. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 6, 10-13, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Gridley, U.S. Patent No. 6,522,656.

Gridley teaches the invention as claimed including distributed processing Ethernet switch with adaptive cut-through switching (see abstract).

Regarding claim 1, a method for the generation and processing of signaling necessary to transmit information through a network, the method comprising the steps of:

Using a bus to transmit data on the network (col. 2, line 14-21, Gridley discloses a packet switching system);

Having a plurality of devices on the bus (col. <sup>2</sup>~~3~~, lines 14-21, Gridley discloses a plurality of ports; col. 5, lines 26-31, Gridley discloses devices being attached to ports);

Using a bus arbitration device to control conflict of data transmissions on the bus (col. 3, lines 64-66, Gridley discloses an arbiter to avoid data collisions);

Having the data be encapsulated in packets with the packets having the following fields, an address field, a command field and a bi-directional data field (col. 2, lines 22-24, Gridley discloses packets with destination addresses; col. 1, lines 22-26, Gridley discloses a packet having a specific function; col. 2, lines 41-44, Gridley discloses packets being received and sent); and

Having a plurality of the devices with the ability to serve as a master device as well as a slave device (col. 1, lines 40-45, Gridley discloses any LAN card receiving and sending a packet; col. 1, lines 30-32, Gridley discloses a LAN card being referred to as a device).

Regarding claim 2, the method of claim 1 in which said packets consist of an address field, a command field, a data field and an error correction field (col. 2, lines 22-24; col. 1, lines 22-26; col. 2, lines 41-44; col. 2, lines 52-54, Gridley discloses check sum information contained in packets).

Regarding claim 3, the method of claim 1 which includes the steps of:  
having a device switch to a master device; and

having the rest of the plurality of devices on the bus set as slaves (col. 1, lines 40-45; col. 1, lines 30-32).

Regarding claim 4, the method of claim 1 which includes the steps of:  
setting up a plurality of devices on the bus in stand-by mode (col. 2, lines 14-21; col. 5, lines 26-31; col. 1, lines 40-45, Gridley discloses devices waiting for a packet to send or a packet to receive); and  
having the plurality of devices in stand-by mode listen to the network without sending data or acknowledges (col.1 lines, 40-45, Gridley discloses devices waiting for packets without performing any functions).

Regarding claim 6, the method of claim 1 in which a device may switch to master while other devices remain as slave devices allowing any device to send data to any device connected to the bus (col. 1, lines 40-45; col. 1, lines 30-32).

Claims 10-13 and 15 do not teach or define any new limitations above claims 1-4 and 6 and therefore are rejected for similar reasons.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 7-9, 14, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gridley further in view Tipley, U.S. Patent No. 5,533,204.

Gridley teaches the invention as claimed including distributed processing Ethernet switch with adaptive cut-through switching (see abstract).

As to claims 5 and 7 Gridley teaches the method of claim 1.

Gridley fails to teach the limitation further including the use of an acknowledge bit sent from the slave device to the master device.

However, Tipley teaches a split transaction protocol for the peripheral component interconnect bus using only one sideband signal (see abstract). Tipley teaches the use of an acknowledge bit sent from the slave device to the master device (col. 5, lines 48-54).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gridley in view of Tipley to use an acknowledge bit. One would be motivated to do so because an acknowledge bit would let the master device know that the slave device received the packet which would help avoid future problems.

Claims 14 and 16 do not teach or define any new limitations above claims 5 and 7 and therefore are rejected for similar reasons.

As to claim 8 Gridley teaches the method of claim 1.

Gridley fails to teach the limitation further including the following steps on the addition of a new device on the network:

Setting the new device as a slave device; and

Resetting the new device as a master device if the new device needs to send data.

However, Tipley teaches a split transaction protocol for the peripheral component interconnect bus using only one sideband signal (see abstract). Tipley teaches the following steps on the addition of a new device on the network:

Setting the new device as a slave device (col. 5, lines 16-27, Tipley discloses new devices added to the bus as slaves); and

Resetting the new device as a master device if the new device needs to send data (col. 5, lines 16-27, Tipley discloses a device receiving a grant signal to become a master and take control of the PCI bus).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gridley in view of Tipley to setting a new device as a slave device and resetting the new device as a master device if the new device needs to send data. One would be motivated to do so because this would allow any device to send data to any other device.

Claim 17 does not teach or define any new limitations above claim 8 and therefore is rejected for similar reasons.

As to claim 9 Gridley teaches the method of claim 1.

Gridley fails to teach the limitation further including waiting a period of time if the bus is not free and repeat checking the bus arbitration for availability of the bus until the data is sent.

However, Tipley teaches a split transaction protocol for the peripheral component interconnect bus using only one sideband signal (see abstract). Tipley teaches the waiting a period of time if the bus is not free and repeat checking the bus arbitration for

availability of the bus until the data is sent (col. 2, lines 23-30, Tipley discloses a retry of sending data until the bus is available).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gridley in view of Tipley to set a waiting a period of time if the bus is not free and repeat checking the bus arbitration for availability of the bus until the data is sent. One would be motivated to do so because this would make sure that data that needs to be sent would be.

Claim 18 does not teach or define any new limitations above claim 9 and therefore is rejected for similar reasons.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,178,462 to Bass et al.

U.S. Pat. No. 5,564,025 to De Freese et al.

U.S. Pat. No. 6,484,225 to Sheikh et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Avi Gold whose telephone number is 703-305-8762. The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 703-308-7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

Avi Gold

Patent Examiner

Art Unit 2157

AMG

  
ARIO ETIENNE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100